

Correct. The information leads to the equation  $x(25 - x) = 126$ . This becomes  $25x - x^2 = 126$  or  $0 = x^2 - 25x + 126$ . Use the Quadratic Formula:

$$x = \frac{-(-25) \pm \sqrt{(-25)^2 - 4 \cdot 1 \cdot 126}}{2 \cdot 1} = \frac{25 \pm \sqrt{625 - 504}}{2} =$$
$$\frac{25 \pm \sqrt{121}}{2} = \frac{25 \pm 11}{2}$$

So  $x = 18$  or  $7$ . The baker charged \$7 for one pie.